

January 18, 2002

EA: 02-006

Ms. S. Lowenstam
Vice President and General Counsel
General Atomics
P.O. Box 85608
San Diego, CA 92186-9784

SUBJECT: NRC INSPECTION REPORT NOS. 50-163/2001-201 AND 50-089/2001-201
AND NOTICE OF VIOLATION

Dear Ms. Lowenstam:

This letter refers to the routine inspection of your General Atomics TRIGA Reactors Facility on September 24 - 26, 2001. The enclosed report presents the results of that inspection. Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations of activities in progress.

Based on the results of this inspection, the NRC has identified a violation of NRC requirements. The violation is cited in the enclosed Notice of Violation (Notice). The circumstances surrounding it are described in detail in the subject inspection report. Letters dated June 29 and November 21, 2000, and March 5, 2001, were sent to NRC which contained safeguards information. However, the documents were marked as 10 CFR 2.790 information. This is a violation of 10 CFR 73.21(e) which requires each document or other matter that contains safeguards information be marked "Safeguards Information" in a conspicuous manner to indicate the presence of protected information. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, this violation would be categorized at Severity Level III. However, based on the facts of the case, we have determined this violation would be appropriately categorized at Severity Level IV. These facts are while the letters did receive a wider than necessary distribution within NRC because they were improperly marked, at no time did members of the public have access to the information, GA handled the material within GA consistent with safeguards information, and the information was sent through the mail packaged in a way to protect the contents from inadvertent disclosure. The violation is of concern because it should have been prevented by your staff placing the proper marking on documents sent to the NRC.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The NRC will use your response in accordance with its policies to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at (the Public Electronic Reading Room) <http://www.nrc.gov/NRC/ADAMS/index.html>. Should you have any questions concerning this inspection, please contact Craig Bassett at (404) 562-4712.

Sincerely,

/RA/

William D. Beckner, Program Director
Operating Reactor Improvements Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket Nos.: 50-163, 50-89
License Nos.: R-67, R-38

Enclosures: 1) Notice of Violation
2) NRC Inspection Report
Nos. 50-163/2001-201 and 50-89/2001-201

cc w/enclosures: Please see next page

General Atomics

Docket No. 50-89/163

cc:

Mr. Steve Hsu
Radiologic Health Branch
State Department of Health Service
P.O. Box 942732
Sacramento, CA 94234-7320

Dr. Keith E. Asmussen, Director
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General Atomics
P.O. Box 85608
San Diego, CA 92186-9784

TRTR Newsletter
Department of Nuclear Engineering Sciences
University of Florida
202 Nuclear Sciences Center
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Mr. John Greenwood
General Atomics
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P.O. Box 85608
San Diego, CA 92186-9784

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***Please see previous concurrence**

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NOTICE OF VIOLATION

General Atomics
TRIGA Reactors Facility

Docket Nos.: 50-163 and 50-89
License Nos.: R-67 and R-38
EA: 02-006

During an NRC inspection conducted on September 24-26, 2001, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violation is listed below:

10 CFR 73.21(e) requires that each document or other matter that contains Safeguards Information as defined in paragraph (b) in this section shall be marked "Safeguards Information" in a conspicuous manner to indicate the presence of protected information.

Contrary to the above, the licensee sent documents containing safeguards information to the NRC on June 29 and November 21, 2000, and March 5, 2001, that was not marked in a conspicuous manner to indicate the presence of protected information.

This is a Severity Level IV violation (Supplement III).

Pursuant to the provisions of 10 CFR 2.201, General Atomics is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the responsible inspector, U.S. Nuclear Regulatory Commission, Region II, 61 Forsyth St. S. W., Suite 23T85, Atlanta, GA 30303, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps, if any, that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, D.C. 20555-0001.

Because your response will be placed in the NRC Public Document room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure or information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial

information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days.

Dated at Rockville, Maryland
this 18th day of January 2002.

U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION

Docket Nos.: 50-163 and 50-89

License Nos.: R-67 and R-38

Report Nos.: 50-163/2001-201 and 50-89/2001-201

Licensee: General Atomics

Facility: TRIGA Reactors Facility

Location: 3550 General Atomics Court, Building 21
San Diego, CA

Dates: September 24-26, 2001

Inspector: Craig Bassett

Approved by: William D. Beckner, Program Director
Operating Reactor Improvements Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

EXECUTIVE SUMMARY

General Atomics
Report Nos: 50-163/2001-201 and 50-89/2001-201

The primary focus of this routine, announced inspection was the on-site review of selected programs of this Class III non-power reactor facility including licensee organization, review and audit functions of the safety committee, ongoing decommissioning activities, radiation protection, and security.

Organization and Staffing

- The licensee's organization was in compliance with the requirements specified in the Technical Specifications and the Decommissioning Plan.
- The staffing level was acceptable for current activities.

Review and Audit Functions

- The review and audit program satisfied Technical Specification requirements.

Decommissioning Project Activities

- The licensee was generally following the Decommissioning Plan schedule.
- Completion of the decommissioning project is dependent upon removal of all fuel from the site which requires Department of Energy approval.

Radiation Protection

- Postings satisfied regulatory requirements.
- Personnel dosimetry was being worn as required and doses were well within the licensee's specified procedural action levels and regulatory limits.
- Surveys had been completed and documented acceptably to permit evaluation of the radiation hazards present at the facility.
- Radiation worker training was being completed as stipulated by procedure.
- Records associated with licensed activities had been maintained as required.
- Proper precautions had been implemented for the project, acceptable work practices were being used, and adequate oversight by health physics personnel was being provided.
- Soil samples were collected for analysis.

Safeguards and Security

- One violation was identified for failure to mark documents sent to the NRC in a conspicuous manner to indicate the presence of protected information.

REPORT DETAILS

Summary of Plant Status

The NRC issued license amendments on August 12, 1999, authorizing the licensee to begin decommissioning the two remaining non-power reactors (NPRs) on site. During this inspection, the licensee was continuing efforts to decommission the reactors as stipulated in the applicable Technical Specifications (TSs) and as outlined in the Decommissioning Plan (DP). Current work activities were centered around the remediation of outdoor areas surrounding the TRIGA Reactors Facility (TRF).

1. ORGANIZATION AND STAFFING

a. Inspection Scope (Inspection Procedure 40755)

The inspector reviewed the following regarding organization and staffing:

- the licensee organizational structure as outlined in the TSs
- management responsibilities as outlined in the DP
- staffing for decommissioning of the TRF
- other resources being committed to the project

b. Observations and Findings

Through discussions with licensee representatives, the inspector determined that management responsibilities and the organization at the facility met the requirements specified in the TSs and the DP. The inspector determined that the TRF Decommissioning Project Manager continued to retain overall responsibility for direction of decommissioning the facility. The site Health Physics Manager and the Criticality and Radiation Safety Committee (CRSC) advised the TRF Decommissioning Project Manager in matters pertaining to radiological and general safety. The TRF Physicist-in-Charge was responsible for maintaining the facility in a safe and proper condition during the evolution of the project and was providing engineering support for the decommissioning activities.

The inspector also determined that the licensee's current staffing level was adequate to support the limited activities being conducted at the facility.

c. Conclusions

The licensee's organization was in compliance with the applicable requirements specified in the TSs and the DP, and the current staffing level was acceptable for ongoing activities.

2. REVIEW AND AUDIT FUNCTIONS

a. Inspection Scope (IP 40755)

The inspector reviewed selected aspects of:

- Criticality and Radiation Safety Committee (CRSC) meeting minutes
- CRSC safety review and audit records
- responses to safety reviews and audits

b. Observations and Findings

Records showed that safety reviews and audits were conducted by various members of the CRSC or other designated persons as required and at the TS required frequency. Topics of these reviews were consistent with TS requirements to provide guidance, direction, and oversight, and to ensure proper decommissioning of the TRF. The inspector noted that the safety reviews and audits and the associated findings were acceptably detailed and that the licensee responded and took corrective actions as needed.

The inspector reviewed a 10 CFR 50.59 evaluation that had been completed by the licensee and reviewed and approved by the CRSC. The 50.59 evaluation covered modifications that were to be made to security measures used in the TRF Mark F area. The evaluation of the proposed changes appeared to be adequate, appropriate questions were raised and addressed, approval was given for the modifications, and the changes were implemented as stipulated.

c. Conclusions

The review and audit program satisfied TS requirements.

3. DECOMMISSIONING ACTIVITIES

a. Inspection Scope (IP 40755)

In order to verify that activities at the site were proceeding as outlined in the DP, the inspector reviewed:

- decommissioning schedule
- ongoing activities and plans

b. Observations and Findings

Decommissioning personnel have been following the general schedule for completion of the project. The schedule, with a few licensee-approved modifications, is outlined in the DP. The schedule indicates that completion of the decommissioning project involving the TRF is ultimately dependent upon the removal of all fuel from the site. This requires Department of Energy approval and acceptance. The licensee is pursuing all options available in this matter. The licensee has reached a point in the decommissioning where most of the activities are concentrated in remediation of the areas surrounding the TRF building. Those portions of the reactor and the associated equipment that could be removed from the Mark F and Mark I without jeopardizing the ultimate fuel removal have been removed.

c. Conclusions

The licensee was generally following the schedule outlined in the DP, which indicates that completion of the project is dependent upon removal of all the fuel from the General Atomics site.

4. RADIATION PROTECTION PROGRAM

a. Inspection Scope (IP 40755)

The inspector reviewed the following in order to verify that the radiation protection program was being implemented at the site as outlined in the DP:

- documentation of the radiation protection program
- radiological signs and postings
- routine surveys, monitoring, and dosimetry records
- training of personnel
- work in progress

b. Observations and Findings

Copies of NRC Form 3, "Notice to Employees," were posted in accordance with 10 CFR 19.11. Caution signs, postings, and control of radiation areas were as required by 10 CFR Part 20, Subpart J. The inspector noted that licensee and contractor personnel were observing the indicated precautions for access to radiologically controlled areas.

Use of dosimeters and exit frisking practices were in accordance with radiation protection requirements. The licensee is using a National Voluntary Laboratory Accreditation Program-accredited vendor to process dosimetry. Personnel exposure records indicated that occupational doses and doses to the public were within 10 CFR Part 20 limits. Training records and observations of workers performing various jobs indicated personnel had been adequately trained in radiation protection practices.

Radiation monitoring and survey activities were being implemented as required. Surveys had been completed and documented and were adequate to permit evaluation of the radiation hazards that exist at the facility.

The work authorization (WA) and associated amendments and records pertaining to decommissioning had been maintained as required by procedure. The WA had been revised to reflect changes to decommissioning requirements and revisions to the TRF procedures. The WA and applicable procedures were acceptable.

Observation of ongoing work indicated that proper precautions were being implemented as required by the appropriate radiation work permits. The individuals involved in the project were using acceptable work practices for contamination control and maintaining exposures as low as reasonably achievable. Adequate oversight of the job was being provided by health physics personnel assigned to the TRF decommissioning.

The inspector directed and observed the collection of soil samples to be analyzed by an NRC contractor as a confirmatory measure for possible release from radiological restrictions of an area outside the TRF building.

c. Conclusions

Postings satisfy regulatory requirements. Personnel dosimetry was being worn as required, and doses were well within the licensee's specified procedural action levels and regulatory limits. Radiation worker training had been completed as stipulated by licensee procedure. Surveys were completed and documented acceptably. Procedures and authorizations governing the work had been maintained as required. Proper precautions were being implemented for the project, acceptable work practices had been used, and adequate oversight by health physics personnel was being provided. Soil samples were collected for analysis.

5. SAFEGUARDS AND SECURITY

a. Inspection Scope (IP 40755)

The inspector reviewed selected aspects of:

- the physical security plan (the current and former versions)
- security systems, equipment, and instrumentation
- implementation of the physical security plan

b. Observations and Findings

Physical protection systems (barriers and alarms), equipment and instrumentation had been tested as required by the security plan. Access control was being maintained as required. Implementing procedures were consistent with the plan as well. However, a problem was noted with marking documents.

10 CFR 73.21(e) requires that each document or other matter that contains Safeguards Information as defined in paragraph (b) in this section shall be marked "Safeguards Information" in a conspicuous manner to indicate the presence of protected information.

On June 29, 2000, the licensee submitted the "Safeguards Contingency Response Plan for the General Atomics TRIGA Reactors Facility" for NRC review and approval, and proposed changes to the "Fixed Site and Transportation Plan for the Protection of Special Nuclear Material at the General Atomics TRIGA Reactors Facility." The licensee implemented the changes to the "Fixed Site and Transportation Plan for the Protection of Special Nuclear Material at the General Atomics TRIGA Reactors Facility" (and additional changes made in response to questions from the NRC staff) and added the "Safeguards Contingency Response Plan for the General Atomics TRIGA Reactors Facility" under 10 CFR 50.54(p) because the licensee determined that the changes did not decrease the effectiveness of the plan. However, because the changes represented a major revision to the security plan, the licensee requested that the plans also be approved by license amendment. The NRC requested additional information concerning the plan, which the licensee provided on November 21, 2000. On March 5, 2001, the licensee submitted updated (February 2001) versions of the plans, incorporating the changes and the additional information provided in the licensee's response to the request for additional information. On May 22, 2001, the licensee provided further information as the result of a telephone conversation between General Atomics and

the NRC staff. Following these various sets of questions and answers pertaining to the security plans, the NRC completed its review and approved the revisions by license amendment letter dated July 20, 2001.

During review of the updated versions of the plans, submitted on March 5, 2001, the NRC staff realized that the plans were not marked by the licensee as containing safeguards information but were marked as 10 CFR 2.790 information. The NRC staff also determined that parts of the June 29 and November 21, 2000, submissions from the licensee were marked 10 CFR 2.790 information instead of safeguards information. As a result, the documents were given wider than necessary distribution within NRC. Distribution within NRC was corrected to properly reflect the status of the information. At no time did members of the public have access to the documents. The material was properly handled by the licensee at their facilities and was sent through the mail packaged in a way to prevent inadvertent disclosure. The licensee was informed that failure to mark the security plans and associated information as safeguards information was a violation of 10 CFR 73.21 (VIO 50-163/2001-201-01).

c. Conclusions

One violation was noted for failure to mark documents sent to the NRC in a conspicuous manner to indicate the presence of protected information.

6. FOLLOW-UP ON PREVIOUS OPEN ITEMS

a. Inspection Scope (IP 40755)

The inspector reviewed the actions taken by the licensee following identification of Open Items during a previous inspection.

b. Observations and Findings

IFI - 50-163/2000-201-01 - Demonstrate an adequate method of adjusting the special nuclear material (SNM) inventory to reflect the change in burn-up calculation method.

In March of 2000, the inspector reviewed the licensee's records concerning burn-up adjustments to the fuel inventory. Several years prior to the inspection the licensee had changed their method of calculating fuel burn-up to better reflect uranium consumption. This change in calculation method resulted in the need for an adjustment to the material inventory records. The records did not appear to clearly reflect what those adjustments were or how they were made. Consequently, the licensee's method of adjusting the SNM inventory to reflect the change in burn-up calculation method was made an Inspector Follow-up Item (IFI).

During this inspection, the inspector discussed this issue with the licensee. It was noted that the person who developed the "new" method for calculating fuel burn-up was not readily available. The licensee indicated that the process would be reviewed and a memorandum written explaining what had been done. This item remains open.

c. Conclusions

One IFI from a previous inspection was discussed but it remains open.

7. EXIT MEETING SUMMARY

The inspection scope and results were summarized on September 26, 2001, with licensee representatives. The inspector discussed the findings for the areas reviewed. Although safeguards materials were reviewed during the inspection, safeguards information is not included in this report. No dissenting comments were received from the licensee.

PARTIAL LIST OF PERSONS CONTACTED

Licensee Personnel

K. Asmussen, Director, Licensing, Safety, and Nuclear Compliance
G. Bramblett, Manager, Decommissioning Project
S. Finchum, Health Physics Technician
L. Gonzales, Manager, Health Physics
J. Greenwood, Physicist-in-Charge and Manager, TRIGA Reactors Facility
B. Hunter, Health Physics Technician

INSPECTION PROCEDURE USED

IP 40755: Class III Non-Power Reactors

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-163/2001-201-01 VIO Failure to mark documents sent to the NRC in a conspicuous manner to indicate the presence of protected information.

Closed

None

Discussed

50-163/2000-201-01 IFI Follow-up on the licensee's program to demonstrate an adequate method of adjusting the SNM inventory to reflect the change in burn-up calculation method.

LIST OF ACRONYMS USED

CFR	Code of Federal Regulations
CRSC	Criticality and Radiation Safety Committee
DP	Decommissioning Plan
IFI	Inspector Follow-up Item
NPR	Non-Power Reactor
NRC	Nuclear Regulatory Commission
PDR	Public Document Room
PSP	Physical Security Plan
SNM	Special Nuclear Material
TRF	TRIGA Reactors Facility
TS	Technical Specification
VIO	Violation
WA	Work Authorization